#### DEPARTMENT OF TRANSPORTATION

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\*\* WARNING \*\* WARNING \*\* WARNING \*\*
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November 18, 2005

04-Son-101,12-31.4/36.0,R24.9/R25.7 04-245414 ACNH-Q101(107) E CML-6204(059)

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in SONOMA COUNTY IN SANTA ROSA ON ROUTE 12 FROM SOUTH SANTA ROSA OVERHEAD TO ROUTE 12/101 SEPARATION AND ON ROUTE 101 FROM EARLE STREET PEDESTRIAN OVERCROSSING TO 0.2 KM SOUTH OF BICENTENNIAL WAY OVERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on December 7, 2005, instead of the original date of November 29, 2005.

This addendum is being issued to set a new bid opening date as shown herein and to revise the Project Plans, the Notice to Contractors and Special Provisions, and the Proposal and Contract.

Project Plan Sheets 284, 305, 327, and 381 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 134A, 134B, and 134C are added. Half-sized copies of the added sheets are attached for addition to the project plans.

Project Plan Sheet 329 is revised. In the table heading "STEEL HANDRAIL (POST TYPE, TIMBER POST)," is revised to "INSTALL STEEL HANDRAIL."

Project Plan Sheet 330 is revised. In the table entitled "PLANE AC PAVEMENT," the following is added to the bottom of the table:

	PROJECT TOTAL	4865.4
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Project Plan Sheet 332 is revised. In the table entitled "EARTHWORK QUANTITIES," the subheading, "ROADWAY EXCAVATION (TYPE Y) (AERIALLY DEPOSITED LEAD)," is revised to read "ROADWAY EXCAVATION (TYPE Y-2) (AERIALLY DEPOSITED LEAD)."

Project Plan Sheet 338 is revised. The quantity table under "RETAINING WALL QUANTITIES RETAINING WALL No. 7," is revised as follows:

LOCATION	DESCRIPTION	QUANTITIES
20.992 Lt "SR"	STRUCTURE EXCAVATION (RETAINING WALL)	$656.3 \text{ m}^3$
227+25 TO	STRUCTURE BACKFILL (RETAINING WALL)	$420.9 \text{ m}^3$
20.992 Lt "SR"	STRUCTURAL CONCRETE (RETAINING WALL)	$307.8 \text{ m}^3$
229+15	BAR REINFORCING STEEL (RETAINING WALL)	3551.2 kg

Project Plan Sheet 701 is revised. The following is added to the "QUANTITIES" table:

"BAR REINFORCING STEEL (RETAINING WALL)

25400 kg"

In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES," is revised as attached.

In the Special Provisions, Section 5-1.14, "COMPENSATION ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS," is revised as attached.

In the Special Provisions, Section 5, "GENERAL," Section 5-1.205, "CULTURAL RESOURCES," is added as attached.

In the Special Provisions, Section 5-1.23, "AERIALLY DEPOSITED LEAD," is revised as attached.

In the Special Provisions, Section 8-1.03, "STATE-FURNISHED MATERIALS," the following is added to the end of the second paragraph:

- K. "Sign panels for roadside signs and overhead sign structures.
- L. Railroad inspections.
- M. Hardware for mounting sign panels.
- N. Marker Panels.
- O. Utility Connection Fee (Electrical and Telephone).
- P. Hardware for installation of bike/pedestrian barrier railing.
- Q. City furnished steel hand railing hardware."

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In the Special Provisions, Section 8-1.03, "STATE-FURNISHED MATERIALS," the following is added after the fourth paragraph:

"The Contractor shall notify the Engineer not less than 120 working days before State-Furnished material items, "Hardware for installation of bike/pedestrian barrier railing," and "City furnished steel hand railing hardware," are to be made available to the Contractor."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following is added after the fifth paragraph:

"Demolition of Sonoma Avenue Pedestrian Overcrossing (Bridge Number 20-219) shall not commence until all bridge work on Santa Rosa Creek Bridge (Bridge Number 20-076), SB101-EB & WB 12 Connector (Bridge Number 20-076F), and EB & WB 12-NB 101 Connector (Bridge Number 20-076H) is completed, and the new pedestrian/bicycle path at Santa Rosa Creek Bridge is constructed and opened to pedestrian and bicycle traffic.

The State owned, City leased public parking lots located beneath Fourth Street Viaduct will not be available to the Contractor until January 16, 2006.

All tree removal and trimming activities shall occur between September 15 and February 15 to avoid the bird nesting season."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following is added after the twentieth paragraph:

"Prior to the start of cold plane asphalt concrete pavement, the contractor shall have a certified asphalt concrete plant and an approved mix design for the initial asphalt concrete paving layer.

Any area that is cold planed in a work period shall be paved with the first layer of asphalt concrete within the same work period before the area is opened to public traffic."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the twenty-second paragraph is revised as follows:

"Construction of the new structural section adjacent to the existing traveled way shall be performed in successive and, once all operations are under way, concurrent operations of excavating, preparing subgrade, placing base materials and paving. Excavation within 2.4 meters of the existing traveled way shall not precede the paving operation by more than 3 working days unless:

- A. approved in writing by the Engineer and;
- B. material is placed and compacted against the vertical cuts within 2.4 meters of the existing traveled way. During excavation operations, native material may be used for this purpose, however, once the placing of the structural section commences, structural material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 1:4 (vertical:horizontal) or flatter to the bottom of the excavation."

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In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the twenty-forth paragraph is revised as follows:

"At the end of each working day if a difference in excess of 0.3 meter exists between the elevation of the existing pavement and the elevation of excavations within 2.4 m of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose; however, once placing of the structural section commences, structural material shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 1:4 (vertical:horizontal) or flatter to the bottom of the excavation. Treated base shall not be used for the taper. Full compensation for placing the material on a 1:4 slope, regardless of the number of times the material is required, and subsequent removing or reshaping of the material to the lines and grades shown on the plans shall be considered as included in the contract price paid for the materials involved and no additional compensation will be allowed therefor. No payment will be made for material placed in excess of that required for the structural section."

In the Special Provisions, Section 10-1.15, "COOPERATION," the following is added after the second paragraph:

"It is anticipated that work by another contractor to demolish State buildings along Third, Fourth, and Fifth Streets in Sonoma County on Route 101 at Fourth Street Viaduct (20-0112R/L; KP 32.3) may be in progress adjacent to or within the limits of this project during progress of the work on this contract."

In the Special Provisions, Section 10-1.19, "OBSTRUCTIONS," the following is added after the fourth paragraph:

"The utility facilities located along westerly State right of way line adjacent to City alley between Route 12 and Santa Rosa Creek will be relocated by April 1, 2006."

In the Special Provisions, Section 10-1.23, "MAINTAINING TRAFFIC," the following is added after the second paragraph:

"Closure of the Third Street northbound off-ramp shall not occur at the same time as closure of the Third Street southbound on-ramp."

In the Special Provisions, Section 10-1.23, "MAINTAINING TRAFFIC," Chart No. 4, Chart No. 5, Chart No. 8, Chart No. 9, Chart No. 12, and Chart No. 14, are revised as attached.

In the Special Provisions, Section 10-1.23, "MAINTAINING TRAFFIC," the following is added after Chart No. 22:

"Full closures of surface streets Third, Fourth, and Fifth Streets at the Fourth Street Viaduct shall only be permitted one at a time in accordance with the stage construction plans. Full closures of surface streets Third, Fourth, and Fifth Streets at the Fourth Street Viaduct and Ninth Street at the Ninth Street Undercrossing shall only be in place during the active progress of bridge construction. The Contractor shall diligently prosecute the work at each closure location from the point that the closure is put in place until the closure is removed. The Contractor shall reopen surface street Ninth Street after completion of each bridge construction staging phase at Ninth Street Undercrossing and close it again prior to starting the next bridge construction staging phase at Ninth Street Undercrossing.

No full closures of College Avenue will be allowed when a full closure is in place at Steele Lane."

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In the Special Provisions, Section 10-1.30, "EXISTING HIGHWAY FACILITIES," Subsection "COLD PLANE ASPHALT CONCRETE PAVEMENT," the eighth paragraph is deleted.

In the Special Provisions, Section 10-1.31, "CLEARING AND GRUBBING," the following is added after the sixth paragraph:

"Tree pruning and removal, as shown on the plans, shall be included with Clearing and Grubbing activities. Trees will be marked by a Caltrans biologist before cutting. Trees to be pruned shall be coordinated with a Caltrans biologist and the Engineer. Pruning of trees shall be done by a certified arborist. The arborist shall make the cuts and the trees shall be pruned to ISA (International Society of Arborists) standards. Final cuts for trees to be removed shall be no higher than 150 millimeters above grade. Stumps shall remain in place and shall otherwise not be removed or disturbed without written approval from the Engineer.

The Contractor shall comply with any requirements regarding Sudden Oak Death (SOD), including requirements from the Sonoma Agricultural Commissioner, state, and federal agencies regarding quarantines for plant material. The Contractor shall present the Engineer with written approval from the County Agricultural Commissioner before any plant material is removed from the site. The project includes cutting of tree and shrub species known to be carriers of SOD, and these trees and shrubs shall be chipped and the chipped material spread within the project limits at locations designated by the Engineer. At the option of the Contractor, species that are not carriers of SOD may also be chipped and spread within the project limits at locations designated by the Engineer. All tree removal and chipping equipment must be pressure washed before leaving the work area. This work shall adhere to BMP (Best Management Practice) NS-8 for Vehicle and Equipment Cleaning.

Full compensation for tree pruning and removal shall be considered as included in the contract lump sum price paid for clearing and grubbing and no separate payment will be made therefor."

In the Special Provisions, Section 10-1.35, "MATERIAL CONTAINING AERIALLY DEPOSITED LEAD," is revised as attached.

In the Special Provisions, Section 10-1.385, "EROSION CONTROL (NETTING)," is added as attached.

In the Special Provisions, Section 10-1.45, "CEMENT TREATED BASE," paragraphs 7 through 13 are deleted.

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In the Special Provisions, Section 10-1.46, "ASPHALT CONCRETE," the following is added after the last paragraph:

"Immediately prior to placing binder, pavement reinforcing fabric, and asphalt concrete surfacing, the pavement shall be cleaned of loose and extraneous materials such as, but not limited to, vegetation, sand, dirt, gravel and water.

Before placing the pavement reinforcing fabric, a binder of paving asphalt Grade AR-8000 shall be applied uniformly to the surface to receive the pavement reinforcing fabric at a rate of not less than 1.15 L per square meter of surface covered. When pavement reinforcing fabric is placed in areas of conform tapers, the binder shall be spread at the approximate rate of 1.4 L per square meter of surface covered. The exact rate of application of asphalt binder will be determined by the Engineer.

Pavement reinforcing fabric shall not be placed in areas of conform tapers when the thickness of the overlying asphalt concrete will be less than 40 mm.

Asphalt concrete surfacing shall be placed over the pavement reinforcing fabric in the same work shift that the fabric is placed.

Pavement reinforcing fabric shall not be exposed to public traffic, Contractor's equipment or elements that will damage the fabric prior to placement of asphalt concrete surfacing.

Asphaltic emulsion shall not be substituted for paving asphalt binder for pavement reinforcing fabric.

Full compensation for cleaning pavement immediately in advance of placing binder, pavement reinforcing fabric, and asphalt concrete surfacing shall be considered as included in the contract price paid per square meter for pavement reinforcing fabric and no separate payment will be made therefor".

In the Special Provisions, Section 10-1.495, "DISPOSAL OF PORTLAND CEMENT CONCRETE (PCC) PAVEMENT GROOVING AND GRINDING RESIDUES," is added as attached.

In the Special Provisions, Section 10-1.50, "PILING," Subsection "MEASUREMENT AND PAYMENT (PILING)," the following is added after the first paragraph:

"Payment for cast-in-place piling shall conform to the provisions in Section 49-6.02, "Payment," of the Standard Specifications and these special provisions except that, when the diameter of cast-in-place piling is shown on the plans as 600 mm or larger, reinforcement in the piling will be paid for by the kilogram as bar reinforcing steel (bridge)."

In the Special Provisions, Section 10-1.525, "REINFORED CONCRETE BOX CULVERTS," is added as attached.

In the Special Provisions, Section 10-1.56, "SOUND WALL," Subsection "MEASUREMENT AND PAYMENT (PILING)," the second paragraph is revised as follows:

"The contract price paid per square meter for sound wall of the types designated in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the sound wall, complete in place, including all vine holes, pilaster, cover plate, and access gates as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer. Sound Wall supports for Sound Wall (Masonry Block)(Barrier) will be measured and paid as separate items of work. Full compensation for Sound Wall supports for Sound Wall (Masonry Block) shall be considered as included in the contract price paid per square meter for Sound Wall (Masonry Block) and no separate payment will be made therefor."

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In the Special Provisions, Section 10-1.81, "CONCRETE BARRIER," the first and second paragraphs are revised as follows:

"Concrete barrier shall conform to the provision in Section 83-2, "Barriers," of the Standard Specifications and these special provisions.

Attention is directed to "Architectural Surface (Textured Concrete)" of these special provisions.

For the structures listed in Section 9 of these special provisions, concrete barrier (Type 732A) will be measured and paid for as concrete barrier (Type 732).

Concrete barrier (Type 736A modified) will be measured and paid for as concrete barrier (Type 736 modified.) Concrete barrier (Type 732 mod) will be measured and paid for as concrete barrier (Type 732.)"

In the Proposal and Contract, the Engineer's Estimate Items 161, 162, 163, 166, 169, 184, 185, 186 and 227 are revised, Items 276, 277, 278, 279 and 280 are added and Items 55, 56, 75, 167, 168 and 275 are deleted as attached.

To Proposal and Contract book holders:

Replace pages 5, 6, 11, 12, 14, and 16 of the Engineer's Estimate in the Proposal with the attached revised pages 5, 6, 11, 12, 14, and 16 of the Engineer's Estimate. The revised Engineer's Estimate is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the NOTICE TO CONTRACTORS section of the Notice to Contractors and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

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This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it. A copy of this addendum is available for the contractor's use on the Internet Site:

# http://www.dot.ca.gov/hq/esc/oe/weekly\_ads/addendum\_page.html

If you are not a Proposal and Contract book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief Office of Plans, Specifications & Estimates Office Engineer

Attachments

#### SECTION 4. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

Attention is directed to the provisions in Section 8-1.03, "Beginning of Work," in Section 8-1.06, "Time of Completion," and in Section 8-1.07, "Liquidated Damages," of the Standard Specifications and these special provisions. The subsections (b) and (c) of the second paragraph and paragraphs three thru five in Section 8-1.06, "Time of Completion" of the Standard Specifications shall not apply.

The Contractor shall begin work within 15 calendar days after the contract has been approved by the Attorney General or the attorney appointed and authorized to represent the Department of Transportation.

The work shall be diligently prosecuted to completion before the expiration of **746 WORKING DAYS** beginning on the fifteenth calendar day after approval of the contract.

The Contractor shall pay to the State of California the sum of \$9300.00 per day, for each and every calendar day's delay in finishing the work in excess of 746 WORKING DAYS.

#### 5-1.14 COMPENSATION ADJUSTMENTS FOR PRICE INDEX FLUCTUATIONS

The provisions of this section shall apply only to the following contract items:

ITEM CODE	ITEM
390155	ASPHALT CONCRETE (TYPE A)
390165	ASPHALT CONCRETE (OPEN GRADED)
390175	ASPHALT CONCRETE (LEVELING)
391031	PAVING ASPHALT (BINDER-PAVEMENT REINFORCING FABRIC)
397001	ASPHALTIC EMULSION (PAINT BINDER)

The compensation payable for asphalt concrete, asphaltic emulsion (paint binder) and paving asphalt (binder-pavement reinforcing fabric) will be increased or decreased in conformance with the provisions of this section for paving asphalt price fluctuations exceeding 10 percent (Iu/Ib is greater than 1.10 or less than 0.90) which occur during performance of the work.

The quantity of paving asphalt used in asphaltic emulsion (paint binder) will be determined by multiplying the item quantity for asphaltic emulsion (paint binder) included in a monthly estimate by the minimum percent residual specified in Section 94, "Asphaltic Emulsions," of the Standard Specifications. The asphaltic emulsion minimum percent residual obtained from Section 94, "Asphaltic Emulsions," of the Standard Specifications will be based on the type of emulsion used by the Contractor.

At the Contractor option, the Contractor may provide actual daily test results for paving asphalt residual for the asphaltic emulsion (paint binder) used. Test results provided by the Contractor shall be from an independent testing laboratory that participates in the AASHTO Proficiency Sample Program. The Contractor shall take samples of asphaltic emulsion from the distributor truck at mid-load from a sampling tap or thief. Two separate 2-liter samples shall be taken in the presence of the Engineer. The Contractor shall provide one sample to the Contractor's independent testing laboratory, with 24 hours of sampling. The second sample shall be given to the Engineer. The test results from the Contractor's independent testing laboratory shall be delivered to the Engineer within 10 days from sample date.

The adjustment in compensation will be determined in conformance with the following formulae when the item of asphalt concrete, asphaltic emulsion or paving asphalt (binder-pavement reinforcing fabric) is included in a monthly estimate:

- A. Total monthly adjustment = AQ
- B. For an increase in paying asphalt price index exceeding 10 percent:

$$A = 0.90 (1.1023) (Iu/Ib - 1.10) Ib$$

C. For a decrease in paving asphalt price index exceeding 10 percent:

$$A = 0.90 (1.1023) (Iu/Ib - 0.90) Ib$$

## D. Where:

- A = Adjustment in dollars per tonne of paving asphalt used to produce asphalt concrete, asphaltic emulsion residual used as paint binder and used as a binder for pavement reinforcing fabric rounded to the nearest \$0.01.
- Iu = The California Statewide Paving Asphalt Price Index which is in effect on the first business day of the month within the pay period in which the quantity subject to adjustment was included in the estimate.
- Ib = The California Statewide Paving Asphalt Price Index for the month in which the bid opening for the project occurred.
- Q = Quantity in tonnes of paving asphalt that was used as a binder for pavement reinforcing fabric plus the quantity of paving asphalt that was used in producing the quantity of asphalt concrete shown under "This Estimate" on the monthly estimate using the amount of asphalt determined by the Engineer plus the quantity in tonnes of paving asphalt that would have been used as residual in the asphaltic emulsion (paint binder) shown under "This Estimate" on the monthly estimate.

The adjustment in compensation will also be subject to the following:

- A. The compensation adjustments provided herein will be shown separately on payment estimates. The Contractor shall be liable to the State for decreased compensation adjustments and the Department may deduct the amount thereof from any moneys due or that may become due the Contractor.
- B. Compensation adjustments made under this section will be taken into account in making adjustments in conformance with the provisions in Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications.
- C. In the event of an overrun of contract time, adjustment in compensation for paving asphalt included in estimates during the overrun period will be determined using the California Statewide Paving Asphalt Price Index in effect on the first business day of the month within the pay period in which the overrun began.

The California Statewide Paving Asphalt Price Index is determined each month on the first business day of the month by the Department using the median of posted prices in effect as posted by Chevron, Mobil, and Unocal for the Buena Vista, Huntington Beach, Kern River, Long Beach, Midway Sunset, and Wilmington fields.

In the event that the companies discontinue posting their prices for a field, the Department will determine an index from the remaining posted prices. The Department reserves the right to include in the index determination the posted prices of additional fields.

The California Statewide Paving Asphalt Price Index is available at the Division of Engineering Services website:

http://www.dot.ca.gov/hq/ese/oe/asphalt index/astable.html

#### 5-1.205 CULTURAL RESOURCES

The California Public Resources Code Chapter 1.7, Section 5097.5 makes it a misdemeanor for anyone to knowingly disturb an archaeological or historical feature. California Public Resources Code Sections 5097.98 and 5097.99 require protection of Native American remains which may be found and outlines procedures for handling any burials found.

The California Administrative Code, Title 14, Section 4308, requires that no person disfigure any object of historical interest or value. The California Penal Code, Title 14, Part 1, Section 622-1/2 makes it a misdemeanor to destroy anything of historical value within any public place.

Should human skeletal material or archaeological remains be found during construction activities, all work must be halted within ten meters of the find. The Contractor shall notify the Engineer immediately. Construction activities within twenty meters of the find shall remain halted until the Contractor has been notified that construction in the vicinity of the find may resume. Archaeological material will be evaluated by a qualified Caltrans archaeologist. The archaeologist will implement the discovery plan approved by the State Historic Preservation officer for this project. Archaeological materials of concern include but are not limited to: metals, glass, ceramics, bone, shell, obsidian, chert and ground stone. If, in the opinion of the Engineer, the Contractor's operations are delayed or interfered with due to investigations made of the archaeological find, the State will compensate the Contractor for such delays to the extent provided in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Full compensation for conforming to the above requirements shall be considered as included in the contract prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

#### 5-1.23 AERIALLY DEPOSITED LEAD

Aerially deposited lead is present within the project limits. Aerially deposited lead is lead deposited within unpaved areas or formerly unpaved areas, primarily due to vehicle emissions.

Attention is directed to "Material Containing Aerially Deposited Lead" and "Project Information" of these special provisions.

Portions of the site investigation report are included in the "Material Information" handout. The complete report, entitled "Site Investigation Report Soil, Groundwater and Asbestos Investigation, State Route 101 Project, Santa Rosa, Sonoma County, California," is available for inspection at the Department of Transportation, Duty Seniors Desk, 111 Grand Avenue, Oakland, CA-510-286-5209.

Excavation, reuse, and disposal of material with aerially deposited lead shall be in conformance with all rules and regulations including, but not limited to, those of the following agencies:

- A. United States Department of Transportation,
- B. United States Environmental Protection Agency,
- C. California Environmental Protection Agency,
- D. California Department of Health Services,
- E. Department of Toxic Substances Control, North Region
- F. California Division of Occupational Safety and Health Administration,
- G. Integrated Waste Management Board,
- H. Regional Water Quality Control Board, Region 1,
- I. State Air Resources Control Board, and
- J. Bay Area Air Quality Management District (BAAQMD).

Materials containing hazardous levels of lead shall be transported and disposed of in conformance with Federal and State laws and regulations, as amended, and county and municipal ordinances and regulations, as amended. Laws and regulations that govern this work include, but are not limited to:

- A. Health and Safety Code, Division 20, Chapter 6.5 (California Hazardous Waste Control Act),
- B. Title 22, California Code of Regulations, Division 4.5 (Environmental Health Standards for the Management of Hazardous Waste), and
- C. Title 8, California Code of Regulations.

# Chart No. 4 Ramp Lane Requirements

**Location**: Route 101 - NB Off Ramp to Third Street (PM 19.981)

## **Sonoma County**

						a.ı	n.							p.i	m.				
Mondays through Thursdays	X	X	X	X	X	X												X	X
Fridays	Х	Х	X	Х	X	X													X
Saturdays	X	X	X	X	X	X	X	X									X	X	X
Sundays	X	X	X	X	X	X	X	X	X	X						X	X	X	X
Day before designated legal holiday	X	X	X	X	X	X													X
Designated legal holidays	X	X	X	Х	X	X	Х	X	X	X						X	X	X	X

## Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

REMARKS: Detour traffic to next off ramp. See Detour Plan.

This chart valid during the following dates: January 1 thru Thanksgiving Day.

For day after Thanksgiving Day thru December 31, see Chart No. 21

# Chart No. 5 Ramp Lane Requirements

Location: Route101 - NB On Ramp from Fifth Street (PM 20.415)

# **Sonoma County**

										-												
						a.r	n.								p.1	n.						
Mondays through Thursdays	X	X	X	X	X	X														X	X	,
Fridays	X	X	X	X	X	X														X	X	
Saturdays	X	X	X	X	X	X	X	X	X										X	X	X	
Sundays	X	X	X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	
Day before designated legal holiday	X	X	X	X	X	X														X	X	
Designated legal holidays	X	X	X	X	X	X	X	X	X	X	X					X	X	X	X	X	X	

#### Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

## REMARKS:

Detour traffic as per Detour Plan.

This chart valid during the following dates: January 1 thru Thanksgiving Day.

For day after Thanksgiving Day thru December 31, see Chart No. 21

			Ra	ımı	•	Cha ane			•	me	nts	\$												
Location: Rte 101 Northbound Off-	Ra	mp		_				_																
						a.r	n.											p.ı	n.					
Mondays through Thursdays	X	X	X	X	X	X																X	X	X
Fridays	Х	X	X	X	X	X																X	X	X
Saturdays	х	X	X	X	X	X	Х	X	X	X											X	X	X	X
Sundays	х	X	X	X	X	X	X	X	X	X									X	X	X	X	X	X
Day before designated legal holiday	X	X	X	X	X	X																X	X	X
Designated legal holidays	X	X	X	X	X	X	X	X	X	X									X	X	X	X	X	X
Ramp may be closed.  No work that interferes with REMARKS: Detour traffic to next										l														
This chart valid during the following For day after Thanksgiving Day thro												ng l	Day	<b>'.</b>										
					(	Cha	rt I	No.	9															
I By 101 C 10				_		ane		_					. ,	7.4	-	· C	-	D		С			<u> </u>	
Location: Rte 101 Southbound On-l	Kar	np	iro	m S	itee	ie i	∠an	e. (	PM	121	.5:	98)	ın (	-1ty	7 01	Sa	nta	Ko	sa,	Soi	non	na (	COL	inty.
						a.ı	n.											p.1	n.					
Mondays through Thursdays	X	X	X	X	X	X																	X	X
Fridays	х	X	X	X	X	Х																	X	X
Saturdays	х	X	X	X	х	X	х	X	X												X	X	X	X
Sundays	X	X	X	X	X	X	Х	X	X	X										X	X	X	X	X
Day before designated legal holiday	х	X	X	X	X	X																X	X	X
Designated legal holidays	Х	X	X	X	X	X	Х	Х	X	X										X	X	X	X	X
Legend: Ramp may be closed.  No work that interferes with REMARKS:	pul	olic	tra	ıffic	e w	ill b	oe a	llo	wed	l														
Detour traffic as per Detour Plan. This chart valid during the following For day after Thanksgiving Day thro												ng l	Day	<b>7.</b>										

# Chart No. 12 Ramp Lane Requirements

**Location**: Route 101 -SB Off Ramp to Fifth St. (PM 20.424)

## **Sonoma County**

																				_
						a.ı	n.							p.i	m.					
Mondays through Thursdays	X	X	X	X	X	X												X	X	X
Fridays	X	х	х	х	X	X												X	х	X
Saturdays	X	X	X	X	X	X	X	X	X								X	X	X	X
Sundays	X	X	X	X	X	X	X	X	X								X	X	X	X
Day before designated legal holiday	X	X	X	X	X	X											X	X	X	X
Designated legal holidays	X	X	X	X	X	X	X	X	X							X	X	X	X	X

## Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

REMARKS: Detour traffic to next off ramp. See Detour Plan.

This chart valid during the following dates: January 1 thru Thanksgiving Day.

For day after Thanksgiving Day thru December 31, see Chart No. 21

# Chart No. 14 Ramp Lane Requirements

Location: Route-101 -SB On Ramp from Third St. (PM 20.010)

# **Sonoma County**

										•											
						a.ı	n.							p.1	m.						
Mondays through Thursdays	X	X	X	X	X	X												X	X	X	
Fridays	X	X	X	X	X	X													X	X	
Saturdays	X	X	X	X	X	X	X	X										X	X	X	
Sundays	X	X	X	X	X	X	X	X	X							X	X	X	X	X	
Day before designated legal holiday	X	X	X	X	X	X													X	X	
Designated legal holidays	X	X	X	X	X	X	X	X	X							X	X	X	X	X	

#### Legend:

Ramp may be closed

No work that interferes with public traffic will be allowed

REMARKS: Detour traffic as per Detour Plan.

This chart valid during the following dates: January 1 thru Thanksgiving Day.

For day after Thanksgiving Day thru December 31, see Chart No. 21

#### 10-1.35 MATERIAL CONTAINING AERIALLY DEPOSITED LEAD

Earthwork involving material containing aerially deposited lead shall conform to the provisions in Section 19, "Earthwork" of the Standard Specifications and these special provisions.

Attention is directed to "Aerially Deposited Lead" of these special provisions.

Type Y-2 material contains aerially deposited lead in average concentrations that exceed one or more of the limits of Type Y-1 material but are less than 50 mg/L extractable lead (based on a modified waste extraction test using deionized water as the extractant) and less than 3397 mg/kg of total lead. Type Y-2 material also exists on the southbound shoulder from Station 203+00 to Station 223+00 and from Station 223+50 to Station 236+63, and on the northbound shoulder from Station 203+00 to Station 236+63 from a depth of 0 m to 0.3 m (1-foot) below existing grade. Type Y-2 material also exists on Route 101 northbound onramp and offramp to and from College Avenue from a depth of 0 m to 1.22 m (4 feet) below existing grade. This material shall be placed as shown on the plans, unless otherwise directed by the Engineer, and covered with a layer of pavement. This material is hazardous waste regulated by the State of California that may be reused as permitted under the Variance of DTSC provided that the lead contaminated soil is placed a minimum of 1.5 m above the maximum water table elevation and protected from infiltration by a pavement structure which will be maintained by the Department. Temporary surplus material may be generated on this project due to the requirements of stage construction. Temporary surplus material shall not be transported outside the State right of way. In order to conform to the requirements of these provisions, it may be necessary to stockpile material for subsequent stages, to construct some embankments out of stage, or to handle temporary surplus material more than once.

Type Z-3 material contains aerially deposited lead in average concentrations (using the 95 percent Upper Confidence Limit) greater than 5.0 mg/L soluble lead, as tested using the Total Concentration Leaching Potential Test. Type Z-3 material exists from Station 223+00 to 223+50 on Route 101 southbound shoulder, from Station 221+50 to Station 222+00 on Route 101 median, from Station 23+50 to Station 24+00 on College Avenue onramp to northbound Route 101 and from Station 29+50 to 30+00 on Steele Lane onramp to southbound Route 101 at a depth of 0 m to 0.3 m (1-foot) below ground surface. This material is Federally regulated hazardous waste and shall be transported to and disposed of at a Class I Disposal Site. Material excavated from these areas shall be transported by a hazardous waste transporter registered with the DTSC using the required procedures for creating a manifest for the material. The vehicles used to transport the hazardous material shall conform to the current certifications of compliance of the DTSC.

#### LEAD COMPLIANCE PLAN

The Contractor shall prepare a project specific Lead Compliance Plan to prevent or minimize worker exposure to lead while handling material containing aerially deposited lead. Attention is directed to Title 8, California Code of Regulations, Section 1532.1, "Lead," for specific California Department of Industrial Relations, Division of Occupational Safety and Health (Cal-OSHA) requirements when working with lead.

The Lead Compliance Plan shall contain the elements listed in Title 8, California Code of Regulations, Section 1532.1(e)(2)(B). Before submission to the Engineer, the Lead Compliance Plan shall be approved by an Industrial Hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene. The plan shall be submitted to the Engineer for review and acceptance at least 15 days prior to beginning work in areas containing aerially deposited lead.

The Contractor shall not work in areas containing aerially deposited lead within the project limits, unless authorized in writing by the Engineer, until the Engineer has accepted the Lead Compliance Plan.

Prior to performing work in areas containing aerially deposited lead, personnel who have no prior training or are not current in their training status, including Department personnel, shall complete a safety training program provided by the Contractor. The safety training program shall meet the requirements of Title 8, California Code of Regulations, Section 1532.1, "Lead."

Personal protective equipment, training, and washing facilities required by the Contractor's Lead Compliance Plan shall be supplied to Department personnel by the Contractor. The number of Department personnel will be 5.

The Engineer will notify the Contractor of acceptance or rejection of the submitted or revised Lead Compliance Plan not more than 10 days after submittal of the plan.

The contract lump sum price paid for Lead Compliance Plan shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in preparing the Lead Compliance Plan, including paying the Certified Industrial Hygienist, and for providing personal protective equipment, training and medical surveillance, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

CONTRACT NO. 04-245414
REVISED PER ADDENDUM NO. 3 DATED NOVEMBER 18, 2005

#### EXCAVATION AND TRANSPORTATION PLAN

Within 7 days after approval of the contract, the Contractor shall submit 3 copies of an Excavation and Transportation Plan to the Engineer. The Engineer will have 7 days to review the plan. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the plan within 7 days of receipt of the Engineer's comments. The Engineer will have 7 days to review the revisions. Upon the Engineer's approval of the plan, 3 additional copies incorporating the required changes shall be submitted to the Engineer. Minor changes to or clarifications of the initial submittal may be made and attached as amendments to the Excavation and Transportation Plan. In order to allow construction to proceed, the Engineer may conditionally approve the plan while minor revisions or amendments are being completed.

- A. Excavation schedule (by location and date),
- B. Temporary locations of stockpiled material,
- C. Dust control measures,
- D. Transportation equipment and routes,
- E. Method for preventing spills and tracking material onto public roads,
- F. Truck waiting and staging areas,
- G.Site for disposal of hazardous waste,
- H.Spill Contingency Plan for material containing aerially deposited lead.

#### DUST CONTROL

Excavation, transportation, placement, and handling of material containing aerially deposited lead shall result in no visible dust migration. The Contractor shall have a water truck or tank on the job site at all times while clearing and grubbing and performing earthwork operations in work areas containing aerially deposited lead.

#### STOCKPILING

Stockpiles of material containing aerially deposited lead shall not be placed where affected by surface run-on or run-off. Stockpiles shall be covered with plastic sheeting 0.33 mm minimum thickness or 0.3 m of non-hazardous material. Stockpiles shall not be placed in environmentally sensitive areas. Stockpiled material shall not enter storm drains, inlets, or waters of the State.

#### MATERIAL TRANSPORTATION

The Department will not consider the Contractor a generator of the hazardous material, and the Contractor will not be obligated for further cleanup, removal, or remedial action for such material handled or disposed of in conformance with the requirements specified in these special provisions and the appropriate State and Federal laws and regulations and county and municipal ordinances and regulations regarding hazardous waste.

#### DISPOSAL

Sampling, analyzing, transporting, and disposing of material containing aerially deposited lead excavated outside the pay limits of excavation will be at the Contractor's expense.

## MEASUREMENT AND PAYMENT

Quantities of roadway excavation (aerially deposited lead), of the types shown in the Engineer's Estimate, will be measured and paid for in the same manner specified for roadway excavation in Section 19, "Earthwork," of the Standard Specifications.

Full compensation for preparing an approved Excavation and Transportation Plan, transporting material containing aerially deposited lead reused in the work from location to location, and transporting and disposing of material containing aerially deposited lead shall be considered as included in the contract prices paid per cubic meter for the items of roadway excavation (aerially deposited lead) involved, and no additional compensation will be allowed therefor.

No payment for stockpiling of material containing aerially deposited lead will be made, unless the stockpiling is ordered by the Engineer.

Sampling, analyses, and reporting of results for surplus material not previously sampled will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

#### 10-1.385 EROSION CONTROL (NETTING)

Erosion control (netting) shall conform with the details as shown on the plans, as specified in these special provisions, and as directed by the Engineer.

Erosion control (netting) work shall consist of furnishing, installing, and maintaining control netting in ditches or swales, on embankment slopes, excavation slopes and other locations as shown on the plans.

Following the installation of erosion control (netting), erosion control materials shall be applied onto the netting face as specified in "Erosion Control (Type D)," of these special provisions.

#### **MATERIALS**

Materials for the erosion control (netting) shall conform to the provisions in Section 20-2, "Materials," of the Standard Specifications and these special provisions.

#### **Erosion Control Netting**

Erosion control netting shall consist of 100 percent spun coir fiber and shall conform to the following:

Specification	Requirement
Weight, grams per square meter ASTM Designation: D 3776	400
Minimum Tensile Strength, kilonewtons, ASTM Designation: D 4595-86	9.0 to 11.3 kN/m in longitudinal direction (dry) 5.0 to 10.7 kN/m in cross-direction (dry) 6.0 to 9.8 kN/m in longitudinal direction (wet) 4.0 to 9.4 kN/m in cross- direction (wet)
Roll Width, meters, min.	4
Area/Roll, square meters, min.	200
Open Area, percent	63-70

#### **Staples**

Staples shall be as shown on the plans.

#### INSTALLATION

Erosion control (netting) shall be installed in ditches or swales, on embankment slopes, or excavation slopes as follows:

- A. Erosion control (netting) strips shall be placed loosely along the ditch or swale with the longitudinal edges and joints parallel to the centerline of the ditch or swale. Longitudinal joints of netting shall be overlapped and stapled. Transverse joints of netting shall be secured in intermediate joint trenches. Staples shall be driven perpendicular to the slopes. Ends of the netting shall be secured in place in key trenches.
- B. Erosion control (netting) strips shall be placed loosely on the embankment or excavation slope with the longitudinal joints perpendicular to the slope contour lines. Longitudinal and transverse joints of netting shall be overlapped and stapled. Staples shall be driven perpendicular to the slopes. Ends of the netting shall be secured in place in key trenches.

#### MAINTENANCE

Erosion control (netting) shall be repaired or replaced on the same day the damage occurs. Damaged netting shall be replaced. Washouts between joints or beneath the erosion control (netting) shall be repaired.

Erosion control (netting) damaged during the progress of work or resulting from the Contractor's vehicles, equipment, or operations shall be repaired or replaced at the expense of the Contractor.

#### MEASUREMENT AND PAYMENT

The quantity of erosion control (netting) will be measured by the square meter as determined from actual slope measurements of the areas covered by the erosion control (netting) excluding overlaps.

The contract price paid per square meter for erosion control (netting) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing erosion control (netting), complete in place, including trench excavation and backfill, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

# 10-1.495 DISPOSAL OF PORTLAND CEMENT CONCRETE (PCC) PAVEMENT GROOVING AND GRINDING RESIDUES

Disposal of portland cement concrete (PCC) pavement grooving and grinding residues shall be in conformance with the provisions in Section 42, "Groove and Grind Pavement," of the Standard Specifications and these special provisions.

The Contractor shall include water pollution control measures to address the handling of the grinding pavement residue within the Storm Water Pollution Prevention Plan or Water Pollution Control Program, as specified in "Water Pollution Control," of these special provisions.

Temporary storage locations shown on the plans for PCC pavement grooving and grinding residues within the highway right of way may be used to dry the material before disposal outside the highway right of way. Temporary storage facilities for PCC pavement grooving and grinding residues shall be in conformance with WM-8, Concrete Waste Management in the Construction Site BMPs Manual or "Temporary Concrete Washout Facility," of these Special Provisions.

A Materials Information Handout is not available for disposal of PCC pavement grooving or grinding residues. The Contractor shall dispose of PCC pavement grooving and grinding residues in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside of the Right of Way," of the Standard Specifications. The facilities listed below were permitted by Regional Water Quality Control Board (RWQCB) or other agencies that may accept PCC pavement grinding and grooving residues as of July 1, 2004. If the Contractor is planning to use one of these sites, the Contractor shall determine if the facility has a current permit to accept PCC pavement grooving and grinding residues and if the facility can accept the waste at the time of generation.

SITE NAME	LOCATION	TELEPHONE	WASTE TYPES /
			RESTRICTIONS
Clean Harbors	2500 West Lokern	(562) 432-5445	Hazardous Solids and Non-
Environmental Services Buttonwillow	Road Buttonwillow, CA		Hazardous Liquids and Solids
	ŕ		
Clean Harbors Environmental Services	1021 Berryessa San Jose, CA	(408) 451-5000	Hazardous and Non-Hazardous Liquids
San Jose	San Jose, CA		Liquids
Crosby & Overton, Inc.	1610 W. 17th Street	(562) 432-5445	Hazardous and Non-Hazardous
	Long Beach, CA	,	Liquids
D/K Environmental	3650 East 26th Street	(323) 268-5056	Hazardous and Non-Hazardous
	Vernon, CA		Liquids and Solids
DeMenno-Kerdoon	200 N. Alameda Street	(323) 268-5057	Hazardous and Non-Hazardous
	Compton, CA	(310) 537-7100	Liquids and Solids
Filter Recycling Services, Inc.	180 West Monte	(909) 424-1630	Hazardous and Non-Hazardous
	Avenue Rialto, CA		Liquids
K-Pure Water Works	8910 Rochester Ave	(909) 476-2308	Non-Hazardous Liquids
	Rancho Cucamonga,	,	1
T : :177	CA 56522 Hi 1 50	(550) 20( (104	N H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Liquid Waste Management McKittrick	56533 Highway 58 McKittrick, CA	(559) 386 - 6104	Non-Hazardous Liquids and Solids
Onyx Environmental Services	1704 W. First Street	(626) 334-5117	Hazardous and Non-Hazardous
LLC	Azusa, CA	(020) 334-3117	Liquids and Solids
Phibro-Tech, Inc.	8851 Dice Road	(562) 698-8036	Hazardous and Non-Hazardous
i moro reen, me.	Santa Fe Springs, CA	(502) 050 0050	Liquids and Solids
Romic Environmental	2081 Bay Road	(650) 324-1638	Hazardous and Non-Hazardous
Technologies Corporation	East Palo Alto, CA		Liquids
Seaport Environmental	700 Seaport Boulevard Redwood City, CA	(650) 364-8154	Non-Hazardous Liquids
Southwest Treatment Systems,	4120 Bandini	(800) 900-3366	Non-Hazardous Liquids
Inc.	Boulevard		
HO Bit. B. C.	Los Angeles, CA	(222) 255 1 125	17 1 137 77
US Filter Recovery Services, Inc.	5375 S. Boyle Avenue Vernon, CA	(323) 277-1495	Hazardous and Non-Hazardous Liquids and Solids
Waste Management	35251 Old Skyline	(559) 386 - 6104	Hazardous and Non-Hazardous
Kettleman City	Road Vettlemen City, CA		Liquids and Solids
	Kettleman City, CA		

If the Contractor disposes of PCC pavement grooving and grinding residues at locations not listed above, the disposal shall be in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications, and the following:

- 1. If the disposal facility is located within the State of California, the facility must be permitted by the RWQCB or other applicable agency, or the Contractor must obtain written approval from the RWQCB or other applicable agency.
- 2. If located outside of the State of California, the facility must be permitted by the applicable local, state, or federal agencies, or the Contractor must obtain written approval from the applicable local, state, or federal agencies.

The following shall be delivered to the Engineer at least 5 days before disposal of PCC pavement grooving and grinding residues:

- 1. The name, address, and telephone number of the disposal facility.
- 2. If the facility is not listed above:
  - A. Copy of the facility's RWQCB or other applicable agency permit, or
  - B. RWQCB's or other applicable agency's approval, or
  - C. Copy of the applicable agency permit if the final disposal location is located outside of the State of California.

The Contractor shall deliver landfill receipts and weight ticket of disposal of residues from PCC pavement grooving and grinding to the Engineer within 5 days of completing of PCC pavement grooving and grinding activities.

The Contractor shall make all arrangements and agreements for the disposal at the time of bidding. Costs related to obtaining approval for disposal within the State of California from the RWQCB or other applicable agency, or the applicable agency if the disposal location is located outside of the State of California, shall be borne by the Contractor and no additional payment shall be made therefore. Full compensation for all costs involved in disposing of PCC pavement grooving or grinding residues as specified in this section, including all costs of handling, temporary storage, hauling and disposal fees, shall be considered as included in the price paid for the contract item of work involving PCC pavement grooving or grinding residues and no additional compensation will be allowed therefore.

#### 10-1.525 REINFORCED CONCRETE BOX CULVERTS

Reinforced Concrete Box Culverts shall be constructed as shown on the plans and in accordance with the provisions in Section 51, "Concrete Structures," of the Standard Specifications.

The Contractor shall have the option of either casting in place or laying precast concrete box culverts.

#### PRECAST CONCRETE BOX CULVERTS

Earthwork, including sand bedding, shall conform to the requirements in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Reinforcement shall be welded wire fabric and shall conform to the Section "Reinforcement" elsewhere in these special provisions.

The precast concrete box culvert shall be Class 2 concrete. Cement for Class 2 concrete shall be Type II Modified portland cement. The maximum water to cement ratio shall be 0.40.

Precast concrete box sections shall be designed in accordance with AASHTO specification M273 for culverts with less than 0.6 meters of cover subjected to highway loading.

A Certificate of Compliance conforming to Section 6-1.07, "Certificates of Compliance," of the Standard Specifications shall be provided to the Engineer for each precast member shipment. The certificate shall be signed by the manufacturer's quality control representative and shall state that all materials and workmanship comply in all respects with the specification requirements and all approved submittals.

The dry cast method of construction will be permitted when designated on the working drawings. When the dry cast method is used, the results shall be equal in all respects to those obtained by conformance with said Section 51 and adequate arrangements shall be made and carried out for curing, finishing and protecting the concrete. External vibrators shall be used and the forms shall be sufficiently rigid to resist displacement or damage. The dry casting forms may be removed at any time after consolidating the concrete providing no slumping of the concrete occurs.

Working drawings shall be submitted to the Engineer for approval in accordance with Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. Working drawings shall show the construction method, precast unit dimensions, configuration of the reinforcement, (including splice type and location), and height of cover.

Concrete for precast units shall be sampled and tested by the precast manufacturer for compressive strength at least once every production shift and not less often than once daily. Test result records shall be available to the Engineer at all times during regular work shifts.

Each precast unit shall be clearly marked by indentation, waterproof paint, or other approved means. Markings shall include the State contract number, date of manufacture, name or trademark of the manufacturer, and design earth cover. Each precast unit shall be clearly marked by indentation on either the inner or outer surface during the process of manufacture so that the location of the top will be evident immediately after the forms are stripped. In addition, the word "top" shall be lettered with waterproof paint on the inside and outside surfaces of the top of each precast unit.

Manufacturing tolerances for precast concrete box culvert sections shall conform to Section 11, "Permissible Variations," of AASHTO Specification: M259M.

The ends of the precast members shall be so formed that the sections can be laid together to make a continuous line of box sections with a smooth interior free of appreciable irregularities in the flow line.

Handling devices or holes will be permitted in each member for the purpose of handling and laying. Cored and handling holes shall be plugged and sealed so the members meet all the requirements in the specification.

Splices in circumferential reinforcement shall be made by lapping. Welded connections at the splices for the outside apron of steel will be allowed only in the splice area shown on the plans. The wall reinforcement on the inside of the box may be lapped and welded at any location or connected by welding at the corners to the slab reinforcement at the inside of the box.

The exposure of spacers, standoffs or the ends of longitudinals used to position the reinforcement shall not be a cause for rejection. Spacers or standoffs shall not be welded to circumferential reinforcement. Spacers or standoffs may be welded to longitudinal reinforcement.

Laying of precast concrete box culvert shall conform to the requirements for laying reinforced concrete pipe in Section 65-1.07, "Laying Pipe," of the Standard Specifications and these special provisions.

Joints shall conform to the requirements for cement mortar or resilient material joints in Section 65-1.06, "Joints," of the Standard Specifications. An external sealing band conforming to ASTM Designation: C 877 or C 877M may be used in lieu of the joint material in said Section 65-1.06.

## MEASUREMENT AND PAYMENT -

Precast concrete box culverts will be measured and paid for by the meter in the same manner as specified for reinforced concrete pipe in Sections 65-1.09, "Measurement," and 655-1.10, "Payment," of the Standard Specifications.

Final in-place cost of precast concrete box culverts shall not exceed the contract price for reinforced concrete box culverts.

Full compensation for erecting precast concrete box culvert members and for temporary shoring shall be considered as included in the contract price paid per meter for precast concrete box culverts and no additional compensation will be allowed therefor.

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	150801	REMOVE OVERSIDE DRAIN	EA	2		
42	150805	REMOVE CULVERT	M	470		
43	150820	REMOVE INLET	EA	24		
44	150821	REMOVE HEADWALL	EA	13		
45	150826	REMOVE MANHOLE	EA	1		
46	150830	REMOVE RETAINING WALL (PORTION)	M3	22		
47	150860	REMOVE BASE AND SURFACING	M3	65		
48	151270	SALVAGE METAL BRIDGE RAILING	M	2707		
49	152390	RELOCATE ROADSIDE SIGN	EA	11		
50	152397	RELOCATE METAL BEAM GUARD RAILING	M	200		
51	152430	ADJUST INLET	EA	4		
52	152439	ADJUST FRAME AND GRATE TO GRADE	EA	6		
53	152500	ADJUST METAL BEAM GUARD RAILING	M	80		
54	152609	MODIFY INLET TO MANHOLE	EA	1		
55	BLANK					
56	BLANK					
57	153215	REMOVE CONCRETE (CURB AND GUTTER)	M	6100		
58	153218	REMOVE CONCRETE SIDEWALK	M2	300		
59	153222	REMOVE CONCRETE ISLAND (PORTIONS)	M3	11		
60	153229	REMOVE CONCRETE BARRIER (TYPE K)	M	220		

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	155003	CAP INLET	EA	24		
62	157551	BRIDGE REMOVAL, LOCATION A	LS	LUMP SUM	LUMP SUM	
63	157552	BRIDGE REMOVAL, LOCATION B	LS	LUMP SUM	LUMP SUM	
64	157553	BRIDGE REMOVAL, LOCATION C	LS	LUMP SUM	LUMP SUM	
65	157554	BRIDGE REMOVAL, LOCATION D	LS	LUMP SUM	LUMP SUM	
66	157555	BRIDGE REMOVAL, LOCATION E	LS	LUMP SUM	LUMP SUM	
67	157561	BRIDGE REMOVAL (PORTION), LOCATION A	LS	LUMP SUM	LUMP SUM	
68	157562	BRIDGE REMOVAL (PORTION), LOCATION B	LS	LUMP SUM	LUMP SUM	
69	157563	BRIDGE REMOVAL (PORTION), LOCATION C	LS	LUMP SUM	LUMP SUM	
70	157564	BRIDGE REMOVAL (PORTION), LOCATION D	LS	LUMP SUM	LUMP SUM	
71	158100	SALVAGE CRASH CUSHION	EA	15		
72	160101	CLEARING AND GRUBBING	LS	LUMP SUM	LUMP SUM	
73	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
74	190101	ROADWAY EXCAVATION	M3	37 600		
75	BLANK					
76	190106	ROADWAY EXCAVATION (TYPE Z-3) (AERIALLY DEPOSITED LEAD)	M3	95		
77	190110	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
78	190151	CHANNEL EXCAVATION	M3	3500		
79	190185	SHOULDER BACKING	STA	25		
80 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	M3	9810		

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161 (S-F)	560214	INSTALL SIGN STRUCTURE (LIGHTWEIGHT)	KG	4470		
162 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	KG	133 165		
163 (S-F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	KG	133 165		
164 (F)	560223	FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITHOUT WALKWAY)	KG	260		
165 (S-F)	560224	INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITHOUT WALKWAY)	KG	260		
166 (S)	561008	760 MM CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	M	13		
167	BLANK					
168	BLANK					
169 (F)	562002	METAL (BARRIER MOUNTED SIGN)	KG	840		
170	566011	ROADSIDE SIGN - ONE POST	EA	44		
171	566012	ROADSIDE SIGN - TWO POST	EA	15		
172	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	8		
173	568007	INSTALL SIGN OVERLAY	M2	7.1		
174	620904	300 MM ALTERNATIVE PIPE CULVERT	M	25		
175	620909	450 MM ALTERNATIVE PIPE CULVERT	M	2800		
176	620913	600 MM ALTERNATIVE PIPE CULVERT	M	90		
177	620919	750 MM ALTERNATIVE PIPE CULVERT	M	12		
178	650067	300 MM REINFORCED CONCRETE PIPE	M	25		
179	650069	450 MM REINFORCED CONCRETE PIPE	M	17		
180	650075	600 MM REINFORCED CONCRETE PIPE	M	12		

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
				,		
181	650077	750 MM REINFORCED CONCRETE PIPE	M	7		
182	650079	900 MM REINFORCED CONCRETE PIPE	M	14		
183	657345	610 MM X 960 MM OVAL SHAPED REINFORCED CONCRETE PIPE (CLASS III)	M	15		
184	037429	730,1150 MM OVAL SHAPED REINFORCED CONCRETE PIPE (CLASS 4)	M	500		
185	037430	565,365 MM OVAL SHAPED REINFORCED CONCRETE PIPE	M	4		
186	037431	1,145,740 MM ELLIPTICAL CONCRETE PIPE	M	18		
187	037432	450 MM CORRUGATED STEEL PIPE WITH DOWNDRAIN JOINTS	M	10		
188	037433	450 MM ALTERNATIVE SLOTTED PIPE	M	900		
189	690160	300 MM CORRUGATED STEEL PIPE DOWNDRAIN (2.01 MM THICK)	M	160		
190	692383	300 MM ANCHOR ASSEMBLY	EA	20		
191	703288	1200 MM CORRUGATED STEEL PIPE RISER (2.77 MM THICK)	M	110		
192	705334	300 MM ALTERNATIVE FLARED END SECTION	EA	1		
193	705336	450 MM ALTERNATIVE FLARED END SECTION	EA	3		
194	705340	1050 MM ALTERNATIVE FLARED END SECTION	EA	1		
195	705648	450 MM SLIDE HEADGATE	EA	1		
196	037434	G2 MANHOLE	EA	4		
197	721009	ROCK SLOPE PROTECTION (FACING, METHOD B)	M3	50		
198	037435	WALL DRAIN WITH ROCK SLOPE PROTECTION	EA	1		
199	727901	MINOR CONCRETE (DITCH LINING)	M3	12		
200	729010	ROCK SLOPE PROTECTION FABRIC	M2	100		

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
221	839702	CONCRETE BARRIER (TYPE 60A)	M	498		
(F)		, , ,	IVI	490		
222 (F)	040026	CONCRETE BARRIER (TYPE 60 MOD)	M	140		
223	037437	CONCRETE BARRIER (TYPE 60C)	M	1520		
224	037438	CONCRETE BARRIER (TYPE 60C MOD)	M	1270		
225	037439	CONCRETE BARRIER (TYPE 60E MOD)	M	82		
226	839709	CONCRETE BARRIER (TYPE 60GE)	M	65		
227 (F)	839720	CONCRETE BARRIER (TYPE 732)	M	1247		
228	839721	CONCRETE BARRIER (TYPE 732A)	M	780		
229	037440	CONCRETE BARRIER (TYPE 732A MOD)	M	160		
230	037441	CONCRETE BARRIER (TYPE 736A MOD)	M	550		
231 (F)	839727	CONCRETE BARRIER (TYPE 736 MODIFIED)	M	153		
232	037442	CONCRETE BARRIER (TYPE 736B MOD)	M	70		
233	839734	CONCRETE BARRIER (TYPE 736SV)	M	1090		
234 (S)	840515	THERMOPLASTIC PAVEMENT MARKING	M2	410		
235 (S)	840561	100 MM THERMOPLASTIC TRAFFIC STRIPE	M	26 000		
236 (S)	840563	200 MM THERMOPLASTIC TRAFFIC STRIPE	M	3820		
237 (S)	840564	200 MM THERMOPLASTIC TRAFFIC STRIPE (BROKEN 3.66 M - 0.92 M)	M	3220		
238 (S)	840567	100 MM THERMOPLASTIC TRAFFIC STRIPE (BROKEN 1.83 M - 0.30 M)	M	150		
239 (S)	840571	100 MM THERMOPLASTIC TRAFFIC STRIPE (BROKEN 5.18 M - 2.14 M)	M	510		
240 (S)	840656	PAINT TRAFFIC STRIPE (2-COAT)	M	45 700		

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
261 (S)	037453	TRAFFIC OPERATIONS SYSTEM (LOCATION 4)	LS	LUMP SUM	LUMP SUM	
262 (S)	037454	TRAFFIC OPERATIONS SYSTEM (LOCATION 5)	LS	LUMP SUM	LUMP SUM	
263 (S)	037455	CAMERA UNIT	EA	3		
264 (S)	037456	PAN AND TILT UNIT	EA	3		
265 (S)	037457	CAMERA CONTROL UNIT	EA	3		
266 (S)	037458	VIDEO ENCODER UNIT	EA	3		
267 (S)	037459	INTEGRATED SERVICE DIGITAL NETWORK TERMINAL ADAPTER	EA	3		
268 (S)	037460	GENERAL PACKET RADIO SYSTEM WIRELESS MODEM ASSEMBLY	EA	8		
269 (S)	037461	DIAL-UP MODEM	EA	1		
270 (S)	037462	EXTINGUISHABLE MESSAGE SIGN RADIO CONTROLLER ASSEMBLY	EA	9		
271 (S)	037463	EXTINGUISHABLE MESSAGE SIGN PANEL	EA	12		
272 (S)	860520	HIGHWAY ADVISORY RADIO SYSTEM	EA	1		
273 (S)	037464	LONG LEAD-IN CABLE LOOP DETECTOR SENSOR UNIT	EA	15		
274 (S)	037465	EMERGENCY VEHICLE DETECTOR SYSTEM	LS	LUMP SUM	LUMP SUM	
275	BLANK					
276 (S)	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	M2	4870		
277	190108	ROADWAY EXCAVATION (TYPE Y-Z)(AERIALLY DEPOSITED LEAD)	M3	4500		
278	561012A	1372 MM CAST-IN-DRILLED-HOLE CONCRET PIPE (SIGN FND)	M	14		
279	561013A	1524 MM CAST-IN-DRILLED-HOLE CONCRET PIPE (SIGN FND)	M	88		
280	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

<b>TOTAL BID:</b>	
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